

REMARKS

Claims 1-15 are pending. By this Amendment, claims 1-15 are canceled and new claims 16-25 are added.

The drawings were objected to for not being labeled in English and not including process labels in Figure 4. Replacement formal drawings are submitted herewith in which labels are provided in English and are added to Figure 4. Handwritten reference numerals have also been replaced. No new matter has been added to the drawings.

The application as filed included a Preliminary Amendment with a substitute set of claims comprising claims 1-10. The original claim set comprised claims 1-15. Substitute claims 1-10 included modifications made during PCT prosecution and eliminated multiple claim dependencies in the original claims. An additional copy of the Preliminary Amendment as filed and the corresponding postcard receipt are included herewith for the Examiner's convenience. The Office Action mailed April 23, 2004, however, addressed the original set of fifteen claims, rather than substitute claims 1-10. During a teleconference on July 27, 2004, regarding the Preliminary Amendment, the Examiner advised Applicants' representative to respond to the outstanding Office Action.

To conform the case with the Applicants' intention on filing, original claims 1-15 are herein canceled and new claims 16-25 are submitted. New claims 16-25 substantially correspond to substitute claims 1-10 of the Preliminary Amendment but include amendments to conform the claims to customary U.S. practice. No narrowing amendments are intended.

New claims 16-25 have been added. Claim 16 is directed to an implementation process of a conversational rational agent. Claims 17-19 depend from claim 16. Claim 20 is directed to a conversational rational agent and claims 21-23 depend from claim 20. Claim 24 is directed to an information server, and claim 25 is directed to a multi-agent system. Insofar as the

references cited in the Office Action may apply to new claims 16-25, the above rejections are respectfully traversed.

The cited reference Martin et al., *The Open Agent Architecture: A Framework for Building Distributed Software Systems*, ARTIFICIAL INTELLIGENCE CENTER, SRI INTERNATIONAL (October 19, 1998) (hereinafter “Cheyer et al.” in accordance with the Office Action) describes a framework for constructing multi-agent systems (refer to page 3, for example) and proposes pre-programmed tools, including an agent library, Interagent Communication Language, and facilitation, for the implementation of such systems; refer generally to Cheyer et al., Abstract, Figures 1 and 2. Thus, Cheyer et al. relates to the exploitation of agents within a multi-agent system, an inter-agent point of view.

The present invention concerns the implementation of the agent itself as considered from the interior of the agent, an intra-agent point of view. For example, new claim 16 discloses an implementation process of a conversational rational agent as a kernel of a dialog system and as an agent of a multi-agent system, including formal specification of components of the architecture and a combination of the components permitting a formal model to be obtained, in cooperation with the other recited elements. The Office Action cited Figure 1, page 33; and §§ 4 and 4.1, pages 9-10, of Cheyer et al. Section 4 of Cheyer et al. describes how structures of multi-agent systems may be defined for implementing complete systems. In particular, § 4 describes how the different components and functions of a complete system may be implemented by dedicated agents that cooperate in the OAA architecture, through the facilitator agent and with the help of the agent library, to implement the functions of the complete system. Cheyer et al., however, do not teach or suggest the implementation process of new claim 16, including a combination of the components permitting a formal model to be obtained, in cooperation with the other recited elements.

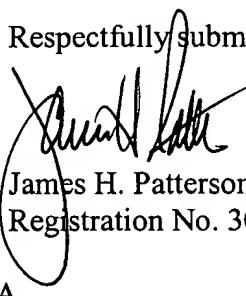
New claims 20 and 24 each recite a formal specification of components of the architecture and a combination of the components allowing a formal model to be obtained, in cooperation with the other respective claimed elements. New claim 25, in cooperation with the other recited elements, recites formal specification of components of the architecture and a combination of the components permitting a formal model to be obtained. As described above with reference to new claim 16, Cheyer et al. does not teach or suggest a combination of the components permitting, or allowing, a formal model to be obtained, in cooperation with the other claimed elements.

Therefore, at least for the reasons set forth above, new claims 16, 20, 24, and 25 are allowable. The remaining new claims variously depend from claims 16, 20, and 24 and are also allowable.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,


James H. Patterson
Registration No. 30,673

Customer No. 24113
Patterson, Thuente, Skaar & Christensen, P.A.
4800 IDS Center
80 South 8th Street
Minneapolis, Minnesota 55402-2100
Telephone: (612) 349-5741